

Delaware Energy Code Update – Residential



As of December 11, 2020, all permit applications for new homes, additions, and alterations must meet the provisions of the 2018 International Energy Conservation Code (IECC). Except for the requirement for duct and envelope testing to be performed by a certified DET verifier, Delaware opted not to include any amendments to the 2018 IECC. The table below provides an overview of the changes between the 2012 IECC with Delaware amendments and the 2018 IECC.

Component	2018 IECC Code Section	2012 IECC with Delaware Amendments	2018 IECC
Envelope			
Windows and doors	R402.1.2	U-0.35	U-0.32
Air barrier and insulation installation inspection	R402.4.1.1	Not required	Must verify items in Table R402.4.1.1
Envelope air leakage testing	R402.4.1.2	Homes <1,500 sqft: 5 ACH50 Homes 1,500-2,000 sqft: 4 ACH50 Homes >2,000 sqft: 3 ACH50	3 ACH50
		No referenced standard	RESNET/ICC 380, ASTM E779 or ASTM E1827
Systems			
Duct leakage testing	R403.3.3 and R403.3.4	6 cfm25/100 sqft	4 cfm25/100 sqft, 3 cfm25/100 sqft if tested prior to air handler installation
		Leakage limit is a hard cap	Leakage limit applies to prescriptive path only (does not apply to Performance or ERI path)
Building Cavities used as ducts	R403.3.5	Allowed when returns run exclusively through conditioned space	Not allowed
Buried ducts	R403.3.6	N/A	Duct and ceiling insulation requirements for when ducts are buried in insulation.
Effective R-value of deeply buried ducts	R403.3.6.1	N/A	Duct insulation may be assigned R-25 when using simulated energy performance compliance paths



Component	2018 IECC Code Section	2012 IECC with Delaware Amendments	2018 IECC
Systems Continued			
Ducts located in conditioned space	R403.3.7	N/A	Buried ducts meeting certain requirements may be considered to be in conditioned space (impacts performance compliance paths only)
Demand recirculation water systems	R403.5.2	N/A	Control requirements for demand recirculation systems. (Does not require demand recirculation systems.)
Hot water pipe insulation	R403.5.3	R-3 insulation required on piping > ¾" and five other conditions	R-3 insulation required on piping ≥ ¾" and five other conditions
Whole-house mechanical ventilation fan efficacy	R403.6.1	HRV/ERV fan efficacy not listed as separate fan type	Table includes minimum efficacy of 1.2 cfm/W for HRV/ERV fans
Lighting			
High-efficacy lamps	R404.1	Min. 75% of lamps are high efficacy	Min. of 90% of lamps are high efficacy
Other			
Energy Rating Index (ERI) compliance path	R406	N/A	New compliance path that involves a whole-house energy simulation. ERI must be ≤ 62
Existing buildings	Chapter 5 [RE]	Existing buildings provisions found in Chapter 1	Existing buildings provisions moved to a new chapter, Chapter 5 [RE] Existing Buildings